

2015 Wholesale Electricity Market Report to the Minister for Energy

Issues Paper

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Economic Regulation Authority

WESTERN AUSTRALIA

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Invitation to make submissions

The purpose of this issues paper is to assist interested parties in making submissions on any operational, strategic, policy or otherwise high-level issues that are considered to be impacting on the effectiveness of Western Australia's Wholesale Electricity Market (**WEM**) in meeting the Wholesale Market Objectives (**Market Objectives**).

Interested parties are invited to make submissions on the Issues Paper by **4.00 pm (WST) on Monday, 1 February 2016** and should be marked to the attention of the Assistant Director Electricity.

Submissions should be made via the [portal](#) on the ERA website.

CONFIDENTIALITY

In general, all submissions from interested parties will be treated as being in the public domain and placed on the Authority's website. Where an interested party wishes to make a submission in confidence, it should clearly indicate the parts of the submission for which confidentiality is claimed, and specify in reasonable detail the basis for the claim. Any claim of confidentiality will be dealt with in the same way as is provided for in section 55 of the *Economic Regulation Authority Act 2003*.

The publication of a submission on the Authority's website shall not be taken as indicating that the Authority has knowledge either actual or constructive of the contents of a particular submission and, in particular, whether the submission in whole or part contains information of a confidential nature and no duty of confidence will arise for the Authority.

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Introduction

The *Wholesale Electricity Market Rules* (**Market Rules**) require that the Economic Regulation Authority (**Authority**) provide a report to the Minister for Energy (**Minister's Report**), at least annually, on the effectiveness of the WEM in meeting the Market Objectives.

The purpose of this issues paper is to assist interested parties in making submissions on any operational, strategic, policy or otherwise high-level issues that are considered to be impacting on the effectiveness of Western Australia's WEM in meeting the Market Objectives.

Submissions from interested parties on issues impacting the effectiveness of the WEM will assist the Authority in preparing its 2015 Minister's Report. The Report will be provided to the Minister following consideration of the submissions received in response to this discussion paper, and analysis of the available market data. A public version of the report will be published on the Authority's website after consultation with the Minister.

Reporting requirements

Under the Market Rules, the Authority is responsible for monitoring the effectiveness of the market in meeting the Market Objectives¹ and providing to the Minister a report each year that includes the Authority's assessment of the effectiveness of the market.

Clause 2.16.12 of the Market Rules, requires the Authority's report to the Minister to contain (but is not limited to) the following:

- a summary of the information and data compiled by the Independent Market Operator (**IMO**) and the Authority under clause 2.16.1;
- the Authority's assessment of the effectiveness of the market, including the effectiveness of the IMO and System Management in carrying out their functions, with discussion of the following:
 - the Reserve Capacity Market;
 - the market for bilateral contracts for capacity and energy;
 - the Short Term Energy Market (**STEM**);
 - Balancing;
 - the dispatch process;
 - the planning processes;

¹ As per clause 1.2.1 of the Market Rules, the Market Objectives are:

to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West Interconnected System (**SWIS**)¹;

to encourage competition among generators and retailers in the SWIS, including by facilitating efficient entry of new competitors;

to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;

to minimise the long-term cost of electricity supplied to customers from the SWIS; and to encourage the taking of measures to manage the amount of electricity used and when it is used.

- the administration of the market, including the Market Rule change process;
- Ancillary Services;
- an assessment of any specific events, behaviour or matters that impacted on the effectiveness of the market; and
- any recommended measures to increase the effectiveness of the market in meeting the Market Objectives to be considered by the Minister.

Electricity Market Review

On 6 March 2014, the Minister for Energy launched the Electricity Market Review (**EMR**). The objectives of the EMR are:

- reducing costs of production and supply of electricity and electricity related services, without compromising safe and reliable supply;
- reducing Government exposure to energy market risks, with a particular focus on having future generation built by the private sector without Government investment, underwriting or other financial support; and
- attracting private-sector participants that are of a scale and capitalisation sufficient to facilitate long-term stability and investment of the electricity market.

The EMR has been undertaken in two phases. Phase 1 assessed the current state of the market and examined options for reform, and was completed in 2014. The Minister announced the commencement of Phase 2 on 24 March 2015. It is being conducted in two stages, firstly development of detailed designs for the set of reforms selected by Government, followed by developing implementation arrangements for those reforms. The EMR is currently in the first stage of Phase 2.

The reforms selected by Government for development in Phase 2 are summarised as follows:

- Network Regulation
 - Transferring regulation of the Western Power network to the national framework and regulator.
- Market Competition
 - Introducing Full Retail Contestability (**FRC**).
 - Removing barriers to entry.
 - Adoption of the national metering framework to facilitate developments in advanced metering and competition in metering services.
- Institutional Arrangements
 - Introducing an independent rule change approval body.
 - Transferring system management functions to the Australian Energy Market Operator (**AEMO**).
 - Transferring market operation functions to AEMO.
 - Introducing a Western Australian reliability panel.
 - Considering replacement of the Wholesale Electricity Market Objectives with the National Electricity Objective.

- Transferring dispute resolution processes which are currently undertaken by the Electricity Review Board and Energy Disputes Arbitrator to alternative (existing) dispute resolution bodies (national or state based as appropriate).
- Wholesale Electricity Market Improvements
 - Reforming the current Reserve Capacity Mechanism.
 - Reforming the energy market operations and processes.

As can be seen, there is significant overlap between the projects being undertaken as part of the EMR and the areas the Authority is required to consider in its assessment of the effectiveness of the market.

As expressed in its 2014 Report, the Authority welcomes and supports the EMR and is pleased to note it is addressing many of the major areas of concern the Authority has raised in previous reports, in particular:

- Market governance;
- The Reserve Capacity Mechanism;
- FRC; and
- Constrained network access.

Whilst the EMR is underway, the Authority will tailor its WEM reviews accordingly to ensure they complement, rather than duplicate, the work being undertaken by the EMR to develop reforms. The Authority will continue to contribute to the EMR process by engaging with the EMR project team and making submissions to the EMR consultations.

In its review of the effectiveness of the WEM, the Authority will focus on operational matters arising during the year under review and on identifying whether there are any existing or emerging issues which may not be dealt with as part of the current planned EMR reforms.

Summary of the 2014 Minister's Report

The Authority provided its 2014 Minister's Report to the Minister in March 2015, and published a public version of that report on its website on 9 September 2015.

A summary of the key findings included in the 2014 Report is set out below. As outlined above, Phase 2 of the EMR was launched by the Minister on 24 March 2015 and therefore post-dates the Authority's 2014 report. To reflect this, the summaries below also include a brief assessment of the potential implications of the reforms selected for Phase 2 of the EMR on the Authority's recommendations in the 2014 Report.

Network connection policies

The Authority's report noted that, in some parts of the network, the cost of upgrades to provide unconstrained access are significant and, as a result, prospective generators do not want, or cannot afford, the cost of connection. At the time of the Authority's review, Phase 1 of the EMR was giving consideration to moving to a constrained network model to deal with these issues. However, the Authority noted that, until this reform is implemented, Western Power must continue to use reasonable endeavours to provide access to covered services.

The Authority noted Western Power had provided constrained connections over the last few years for a small number of customers by seeking specific exemptions from the Technical

Rules.² A pre-requisite of an exemption from the Technical Rules is that it will not adversely impact on other users of the network. Consequently, network constraints associated with connections made on this basis would be expected to occur on an infrequent basis with no material impact on wholesale energy prices or power system reliability.

However, during the 2014 review, the Authority became aware that Western Power proposed introducing a more complex connection approach for groups of new customers in constrained parts of the network. This involved sharing constrained connections across multiple customers with rules in place to determine the order in which customers would be dispatched depending on the nature of the constraint. The Authority noted the processes required to implement this new approach did not appear to have been contemplated in Western Power's approved Applications and Queuing Policy (**AQP**) or Technical Rules. It raised concerns that introducing such arrangements without a proper review of the AQP and Technical Rules could potentially result in failure to achieve the Code and WEM objectives. Given these emerging issues, the Authority considered the AQP and Technical Rules were in need of review.

As noted above, one of the reform measures being progressed as part of Phase 2 of the EMR is transferring network regulation to the national framework. This will include adoption of a constrained network model. Moving to this model will require transitional arrangements which are also being considered as part of the EMR. However, as was the case in 2014, in the interim Western Power must continue to use reasonable endeavours to provide access to covered services and should ensure its processes are updated as necessary to provide clear guidance to customers seeking access.

Balancing Market and STEM

A competitive balancing market was introduced in July 2012, replacing the previous mechanism where Verve Energy provided all balancing energy. This new market has delivered significant improvements including:

- enabling all balancing facilities to participate in the Balancing Market;
- dispatching the lowest cost combination of facilities made available for Balancing; and
- establishing a competitive market based balancing price.

In its report, the Authority noted that further improvements were planned to be progressed through the EMR and recommended that priority should be given to those developments which have the greatest impact on enabling and incentivising generators to fully participate in the market to maximise competition.

The Authority also considered a review of the STEM should be a high priority to ensure it provides value for the transaction costs incurred by participants and the administrative effort required to support it.

As noted above, Phase 2 of the EMR includes reforms in relation to the energy market operations and processes. These include accommodating a constrained network access model, introducing facility bidding for Synergy's generators, reducing the gate closure period, co-optimising energy and ancillary services and reforming the design of the STEM.

² These exemptions are required to be approved by the Authority.

Load Following Ancillary Services (LFAS) Market

LFAS Prices were very high when the new LFAS market commenced in July 2012. Although prices have now reduced they are significantly higher than for similar services in the NEM. The Authority noted considerable effort had been made by the IMO and System Management, following introduction of the LFAS market, to better understand the LFAS requirement and had identified a number of planned refinements. The Authority also noted that improvements identified in other areas of the Market Rules (e.g. reduced gate closure times) would also facilitate better LFAS outcomes.

The Authority noted that currently the costs of LFAS are spread across all market customers. The Authority considered that high priority should be given to introducing the principle of user (or causer) pays as this would increase the opportunities and incentives for cost reduction.

As noted above, Phase 2 of the EMR includes reforms in relation to the energy market operations and processes which should lead to improved outcomes in ancillary services, including LFAS.

Sustained outages

In its report, the Authority noted that, despite significant transmission outages during the 2013/14 year, system security was generally maintained. However, the Authority considered improvements could be made to streamline the process for managing system security during network outages and ensuring costs are minimised.

The Authority noted that the criteria System Management is required to use under the Market Rules when dealing with forced network outages may not always result in the lowest overall cost. Currently, System Management is only required to consider system security when dealing with outages. The Authority considered outcomes could be improved by:

- Providing System Management with visibility of prices to enable System Management to ensure it chose the most cost effective option to maintain system security.
- Changing rules around use of Demand-Side Management (**DSM**) to provide a more flexible method for dealing with localised outages, rather than the current arrangements which are designed around dispatching on a system wide basis.

The Authority considered System Management should retain responsibility for ensuring power system security, including deciding how to deal with forced outages on the network. The Authority considered that, providing it has access to all the relevant cost information, System Management is best placed to ensure the right balance between system security and cost.

However, the Authority considered allocating the costs of constrained on/off compensation and ancillary services on a user (or causer) pays basis would improve incentives for efficient market outcomes. In particular, ensuring Western Power faces all the costs arising due to transmission outages (which are currently paid for by market customers through constrained on/off payments or dispatch support services) would provide better signals for network planning and investment.

The Authority notes the recent decision to transfer market operation and system management functions to AEMO. Combining these functions should ensure that energy dispatch (including decisions in relation to maintaining system security during outages) is

undertaken in the most cost effective manner as both operational matters and energy prices will be taken into account.

Furthermore, moving to the national framework for electricity networks and the reforms planned as part of the EMR's energy market operations and processes project should enable the issues in relation to the allocation of costs for network outages to be addressed.

Approach and focus for the 2015 Minister's Report

A summary of the key matters the Authority is required to review under the Market Rules, together with relevant published market data, is included in Appendix 1. As noted above, there is significant overlap between the projects being undertaken as part of the EMR and the areas the Authority is required to consider in its assessment of the effectiveness of the market. In its 2015 review, the Authority will focus on operational matters arising during the 2014/15 year and on identifying whether there are any existing or emerging issues which may not be dealt with as part of the current planned EMR reforms. To assist this, the Authority welcomes views from stakeholders on any specific areas, particularly in relation to the 2014/15 year, where it is considered further investigation by the Authority would be useful.

In addition, the Authority plans to review the current level of competition in the market and give consideration to potential future technology and business models which may require future changes in the Market Rules. These are discussed further below.

Competition and Barriers to Entry

Access to competitive wholesale energy supplies is essential for developing competition in the retail market. Currently only 65 per cent of the retail market is contestable. The Government has announced it intends to introduce FRC in the next few years. Successful outcomes for consumers as a result of FRC require a competitive wholesale market which can be accessed readily by existing and new retailers.

The Authority is required to undertake annual reviews of the Electricity Generation and Retail Corporation (**EGRC**) Regulatory Scheme which was put in place following the merger of Synergy and Verve Energy. The Authority published a discussion paper calling for public submissions on 11 November 2015.³ This Scheme plays an important role in ensuring Synergy offers wholesale energy supplies to third party retailers on the same or similar basis to its own retail business. As part of its review of the EGRC Regulatory Scheme, the Authority will be examining the current level of competition in the wholesale and retail markets to assess how effective the EGRC Regulatory Scheme has been in ensuring a level playing field in relation to wholesale supplies from Synergy to third parties and its own retail businesses.

The Authority will draw on this work in its review of the WEM and expand its considerations to evaluate the overall level of competitiveness in the WEM. This will include reviewing how effectively the current market power mitigation measures (including the Energy Price Limits and Short Run Marginal Cost bidding requirements) are currently working. The Authority will also consider any barriers impacting on the ability of generators to compete in the

³ The discussion paper is available on the ERA's website <https://www.erawa.com.au/electricity/wholesale-electricity-market/reviews/the-electricity-generation-and-retail-corporation-egrc-regulatory-scheme>

market and retailers to access wholesale supplies, over and above those addressed by the EGRC Regulatory Scheme.

Innovation and Flexibility in Market Rules

New technologies and business models (including distributed generation and storage) are increasingly driving change in the way businesses are seeking to buy and sell energy. The WEM will need to be responsive to these needs in order to meet its objective of encouraging competition and not discriminating against particular energy options and technologies. Phase 2 of the EMR is giving consideration to removing regulatory barriers which may currently exist in relation to new technologies. These include any current regulations or rules preventing the grid connection of distributed generation and storage or the introduction of stand-alone power systems.

The Authority intends to give further consideration to what changes may be required in the future to enable new technologies and/or energy supply business models to compete in the WEM. The Authority would welcome input from stakeholders in relation to views on additional flexibility in the Market Rules which may be required.

Stakeholder Engagement

In addition to seeking formal submissions, the Authority would be happy to meet with stakeholders to discuss any matters related to this review. The Authority will take into account the views expressed by stakeholders in the preparation of its report to the Minister.